

Application No. 09/626,566  
Filed: July 27, 2000  
Group Art Unit: 1651

REMARKS

1. This is in response to the Office Action mailed June 4, 2003. Claims 8, 22, 25, 29 and 43-61 remain pending in this application.
2. Applicant appreciates the courtesy extended by the Examiner in allowing a telephone interview on August 7, 2003. Participating in the interview were Examiner Ralph J. Gitomer, Qingping Jiang (co-inventor) and Arthur S. Morgenstern (Attorney of Record). At the interview, it was agreed that the scope of Group I, the elected Group of claims, should be expanded. However, the Examiner had difficulty in searching many of the claims in Group I aside from claims 43-46. Applicant agreed to draft other claims in Group I that could be searched to replace those that were difficult to search.

In an attempt to simplify the searching needed, Applicant is introducing new claims 47-61 and has amended claims 8, 22, 25 and 29, all of which are intended to be in Group I. Applicant requests that, if the Examiner has difficulty in searching these new claims, he contact Applicant. Applicant has cancelled claims 1-7, 9-21, 23-24 and 26-28 in Group I but reserves the right to reinstate these claims as the prosecution proceeds.

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3. Applicant has cancelled claims 30-42, which are in Groups II, III and IV.

4. Applicant requests reconsideration of the rejections under 35 USC 112, second paragraph.

a. As indicated above, Applicant intended that claims 43-46 be examples of the claims in Group I. Claim 43 defines MP to be  $\text{PO}_3\text{Na}_2$ . The methoxy substituent in the  $\text{R}_{3c}$  position (Figures 1I and 4 (page 10) in the paper filed 5/5/03) is disclosed on page 24, line 23 - page 25, line 13 of the application and is claimed in new claims, including claim 47.

b. Applicant has amended claims 43 and 44 to begin with "A".

5. Applicant had amended the title in the Preliminary Amendment filed 11/8/00 to read CHEMILUMINESCENT SUBSTRATES OF HYDROLYTIC ENZYMES. Applicant believes that this revised title reflects the claims pending and requests reconsideration of the objection to the title.

6. The abstract has been amended as shown above.

7. The description of the structure in Formula I on page 19 of the application (Lumi-M-P) is what was intended to be in the

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original application. The components of the structure were defined in lines 7-17 on page 19. Similarly, in other places in the application, a similar description was used to define the scope of the compounds intended to be covered. (See, for example, Formula I on page 11.)

It should be noted that several typographical errors were corrected in the 11/8/00 Preliminary Amendment, namely the location of Formula III (on pages 26-27 of the application) and Formula X (pages 46-47).

8. In response to the request from the Examiner, Applicant would like to point out that there is support in the original application for claims 43-46, as shown in the following table:

General structure	P. 23, Formula II
P is $\text{PO}_3\text{Na}_2$	P. 34, fig 1
P is sugar	P. 22, lines 6-9 - these are enzymes that react in Reaction A (P. 12), which implies that the sugar must be part of the substrate, and this is the only place in the substrate where the sugar could be located
M is O	P. 24, lines 4-6

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R1 is methyl P. 24, line 15  
R1 is sulfobutyl Fig. 1G  
R1 is sulfopropyl P. 24, line 16, which defines the  
preferred groups as sulfoalkyl  
R<sub>2a</sub> etc are hydrogen P. 24, lines 23-24; P.25, lines 4-5  
A- is counterion P. 26, lines 3-16  
X is O, N or S P. 26, line 17  
Variations when X is O, N, S P. 26, line 17-P. 29, line 13

Note that there is additional support in the application for the claims. Some of this additional support was identified in the table submitted on April 2, 2003.

9. Support for the new substrate claims also can be found in the original application. For example,

claims 57-59 Formulas on top 2 lines of page 21  
claim 60 Formula IV on page 30; page 29 lines 14-22  
claim 61 Formula VI on page 31 of the application; page 30,  
line 4 through page 31, line 10

10. Applicant notes that two Information Disclosure Statements have been filed in this application. The first was filed November

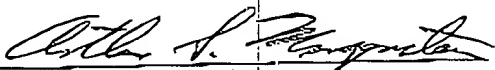
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8, 2000 and the second filed March 12, 2001. Please provide acknowledgements of the PTO-1449's for these IDS's.

The Examiner is encouraged to telephone the undersigned attorney to discuss any matter that would expedite allowance of the present application.

Respectfully submitted,

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